

## ABSTRACT

In a wiring substrate, a high-frequency component is carried on a dielectric board having a transmission line formed on its surface, a reverse surface of the dielectric board is formed with an opening in a predetermined cross-sectional shape, and a high-frequency connecting pad is formed around the opening. In the wiring board, a dielectric board penetrates a waveguide structure and has its inner wall coated with a conductor, and a high-frequency connecting pad is formed on a surface of the dielectric board. The wiring substrate is placed on the wiring board, and the respective high-frequency connecting pads are electrically connected to each other, to fabricate a module. Even when a low-cost material having a large dielectric loss tangent is used for the wiring board, a high-frequency signal can be prevented from being attenuated.